

App. No. 10/763,505
Amendment Dated: February 5, 2007
Reply to Final Office Action of December 4, 2006

RECEIVED
CENTRAL FAX CENTER
JUN 04 2007

Amendments to the Claims:

1 (currently amended): A method for linking binary dependency relationships, comprising:

obtaining dependency relationships relating to binaries; using a vector to represent dependency information for one of the binaries; wherein the dependency information relates to the dependency relationships for the one of the binaries; creating a dependency matrix comprising at least two of the vectors; obtaining a full dependency matrix and identifying binary circular dependency clusters; wherein obtaining the full dependency matrix comprises calculating a next order dependency matrix until the next order dependency matrix is the same as previous order dependency matrix;

storing the dependency relationships within a binary dependency database; and

providing dependency information relating to the binaries that links dependencies wherein some of the dependency information spans that may span across the binaries and functions.

2 (previously presented): The method of Claim 1, further comprising, classifying each of the dependency relationships into a dependency type.

3 (previously presented): The method of Claim 2, wherein classifying each of the dependency relationships into the dependency type further comprise classifying the dependency type as a dynamic type when the dependency relationship is established at a runtime, and classifying the dependency type as a static type when the dependency relationship is established from inspecting the binaries.

4 (original): The method of Claim 2, further comprising determining a strength of a bond relating to the binaries.

5 (currently amended): The method of Claim 4, using the full dependency matrix to identify the binary circular dependency clusters ~~further comprising determining at least first order dependencies.~~

App. No. 10/763,505
Amendment Dated: February 5, 2007
Reply to Final Office Action of December 4, 2006

6 (previously presented): The method of Claim 5, further comprising determining a likelihood of whether each of the dependency relationships is required.

7 (previously presented): The method of Claim 4, further comprising performing analysis regarding a footprint associated with at least some of the binaries.

Claims 8-10 (canceled).

11 (original): The method of Claim 10, wherein the dependency matrix is an n^{th} order dependency matrix.

Claim 12 (canceled).

13 (original): The method of Claim 1, wherein obtaining the dependency relationships relating to the binaries further comprises determining static and dynamic dependencies.

14 (currently amended): A system for linking binary dependency relationships, comprising:

a software system containing binaries;

a binary dependency database that is configured to store static and dynamic dependency relationships relating to the binaries; and

a processing tool that is configured to perform actions, including:

obtaining dependency relationships relating to the binaries; using a vector to represent dependency information for one of the binaries; wherein the dependency information relates to the dependency relationships for the one of the binaries; creating a dependency matrix comprising at least two of the vectors; obtaining a full dependency matrix and identifying binary circular dependency clusters; wherein obtaining the full dependency matrix comprises calculating a next order dependency matrix until the next order dependency matrix is the same as a previous order dependency matrix;

storing the dependency relationships within the binary dependency database; and

providing dependency information relating to the binaries that links dependencies wherein some of the dependency information spans across the binaries and functions.

App. No. 10/763,505
Amendment Dated: February 5, 2007
Reply to Final Office Action of December 4, 2006

~~for processing the dependency relationships.~~

15 (original): The system of Claim 14, further comprising, classifying the dependency relationships into dependency types.

16 (original): The system of Claim 15, wherein the binary database further comprises a strength of a bond between the binaries.

17 (original): The system of Claim 16, wherein the processing tool further comprises performing an analysis regarding a footprint associated with the binaries.

18 (currently amended): The system of Claim 15, wherein classifying the dependency relationships into the dependency type further comprises classifying the dependency type as a dynamic type when the dependency relationship is established at a runtime, and classifying the dependency type as a static type when the dependency relationship is established from inspecting the binaries Claim 16, wherein the processing tool further comprises using at least one matrix to represent dependency information for the binaries.

19 (currently amended): The system of Claim 18, further comprising using the calculating a full dependency matrix to identify the binary circular dependency clusters.

20 (currently amended): A computer-readable medium having computer executable instructions encoded thereon, the instructions being executed by a processor to provide the steps comprising:

obtaining dependency relationships relating to binaries; using a vector to represent dependency information for one of the binaries; wherein the dependency information relates to the dependency relationships for the one of the binaries; creating a dependency matrix comprising at least two of the vectors; obtaining a full dependency matrix and identifying binary circular dependency clusters; wherein obtaining the full dependency matrix comprises calculating a next order dependency matrix until the next order dependency matrix is the same a previous order dependency matrix;

storing the dependency relationships within a binary dependency database; and

App. No. 10/763,505
Amendment Dated: February 5, 2007
Reply to Final Office Action of December 4, 2006

providing dependency information relating to the binaries that links dependencies wherein some of the dependency information spans across the binaries and functions.

~~obtaining static and dynamic dependency relationships relating to binaries;~~

~~storing the relationships within a binary dependency database such that the relationships span across binaries; and~~

~~providing a processing tool for processing the dependency relationships.~~

21 (currently amended): The computer-readable medium of Claim 20, further comprising, classifying the dependency relationships into a dependency type[[s]].

22 (original): The computer-readable medium of Claim 21, further comprising determining a strength of a bond between the binaries.

23 (original): The computer-readable medium of Claim 22, further comprising performing analysis regarding a footprint associated with specific binaries selected from the binaries.

24 (currently amended): The computer-readable medium of Claim 21, Claim 22, wherein classifying each of the dependency relationships into the dependency type further comprise classifying the dependency type as a dynamic type when the dependency relationship is established at a runtime, and classifying the dependency type as a static type when the dependency relationship is established from inspecting the binaries further comprising determining binary dependency clusters within the binaries.

25 (currently amended): The computer-readable medium of Claim 22, wherein the dependency matrix is an nth order dependency matrix, ~~further comprising creating a dependency matrix.~~

App. No. 10/763,505
Amendment Dated: February 5, 2007
Reply to Final Office Action of December 4, 2006

26 (currently amended): The computer-readable medium of Claim 20 ~~Claim 25~~, further comprising determining a likelihood of whether each of the dependency relationships is required ~~obtaining a full dependency matrix and identifying binary circular dependency clusters~~.

27 (new): The computer-readable medium of Claim 20, wherein obtaining the dependency relationships relating to the binaries further comprises determining static and dynamic dependencies.

28 (new): The system of Claim 14, further comprising determining a likelihood of whether each of the dependency relationships is required.

29 (new): The system of Claim 14, wherein obtaining the dependency relationships relating to the binaries further comprises determining static and dynamic dependencies